Applicant: Masanobu Kobayashi et al. Attorney's Docket No.: 18220-0003US1 / ONR-Serial No.: 10/551,866 A0403P-US

Serial No.: 10/551,866 Filed: September 28, 2006

Page : 2 of 9

Amendments to the Claims:

Please amend claims 1, 10, 17, 41, and 51-53 as follows. The claims and their status are shown below. This listing of claims replaces all prior versions of claims in the application.

- (Currently Amended) A method of screening for a therapeutic agent for solid tumor eaneer, wherein the method comprises the steps of:
- (a) contacting a test substance with <u>a purified</u> serine/threonine kinase Pim-1 <u>polypeptide</u> or a partial peptide thereof, or a salt thereof;
- (b) detecting the phosphorylation activity of <u>the purified</u> serine/threonine kinase Pim-1 polypeptide; and
- (c) identifying a compound test substance that inhibits the phosphorylation activity of the purified serine/threonine kinase Pim-1 polypeptide, wherein a test substance that inhibits the phosphorylation activity of the serine/threonine kinase Pim-1 polypeptide is as a therapeutic agent for solid tumor cancer.
 - 2-9. (Cancelled)
- 10. (Currently Amended) A method of screening for an apoptosis-inducing agent <u>for solid tumor</u>, wherein the method comprises the steps of:
- (a) contacting a test substance with <u>a purified</u> serine/threonine kinase Pim-1 <u>polypeptide</u> or a partial peptide thereof, or a salt thereof;
- (b) detecting the phosphorylation activity of $\underline{\text{the purified}}$ serine/threonine kinase Pim-1 $\underline{\text{polypeptide}}$; and
- (c) identifying a eompound test substance that inhibits the phosphorylation activity of the purified serine/threonine kinase Pim-1 polypeptide, wherein a test substance that inhibits the phosphorylation activity of the serine/threonine kinase Pim-1 polypeptide is as an apoptosisinducing agent for solid tumor.
 - 11-16. (Cancelled)
- 17. (Currently Amended) A method of screening for an anticancer agent potentiator <u>for solid tumor</u>, wherein the method comprises the steps of:
- (a) contacting a test substance with <u>a purified</u> serine/threonine kinase Pim-1 <u>polypeptide</u> or a partial peptide thereof, or a salt thereof;

Applicant: Masanobu Kobayashi et al. Attorney's Docket No.: 18220-0003US1 / ONR-Serial No.: 10/551,866 A0403P-US

Filed : September 28, 2006

Page : 3 of 9

(b) detecting the phosphorylation activity of the purified serine/threonine kinase Pim-1 polyneptide; and

(c) identifying a eompound test substance that inhibits the phosphorylation activity of the purified serine/threonine kinase Pim-1 polypeptide, wherein a test substance that inhibits the phosphorylation activity of the serine/threonine kinase Pim-1 polypeptide is as an anticancer agent potentiator for solid tumor.

18-40. (Cancelled)

- 41. (Currently Amended) A method of screening for substances that enhance or inhibit the activity of a <u>purified</u> scrine/threonine kinase Pim-1 <u>polypeptide</u>, wherein the method comprises the steps of:
- (a) contacting a test substance with the purified serine/threonine kinase Pim-1 polypeptide or a partial peptide thereof, or a salt thereof;
- (b) detecting the phosphorylation activity of <u>the purified</u> serine/threonine kinase Pim-1 <u>polypeptide</u>; and
- (c) identifying a substance that enhances or inhibits the activity of the purified serine/threonine kinase Pim-1 polypeptide.
- 42. (Original) The method of claim 41, wherein the phosphorylation activity is detected by using, as an indicator, a change in the expression level of a reporter gene that is activated in response to binding of a serine/threonine kinase Pim-1 phosphorylation substrate.
- 43. (Original) The method of claim 41, wherein the phosphorylation activity is detected using an antibody that recognizes the phosphorylated form of the serine/threonine kinase Pim-1 phosphorylation substrate.
 - 44. (Canceled)
- 45. (Previously Presented) The method of claim 1, wherein the phosphorylation activity is detected by using, as an indicator, a change in the expression level of a reporter gene that is activated in response to binding of a serine/threonine kinase Pim-1 phosphorylation substrate.
- 46. (Previously Presented) The method of claim 1, wherein the phosphorylation activity is detected using an antibody that recognizes the phosphorylated form of the serine/threonine kinase Pim-1 phosphorylation substrate.

Applicant: Masanobu Kobayashi et al. Attorney's Docket No.: 18220-0003US1 / ONR-Serial No.: 10/551,866 A0403P-US

Filed : September 28, 2006

Page : 4 of 9

47. (Previously Presented) The method of claim 10, wherein the phosphorylation activity is detected by using, as an indicator, a change in the expression level of a reporter gene that is activated in response to binding of a serine/threonine kinase Pim-1 phosphorylation substrate.

- 48. (Previously Presented) The method of claim 10, wherein the phosphorylation activity is detected using an antibody that recognizes the phosphorylated form of the serine/threonine kinase Pim-1 phosphorylation substrate.
- 49. (Previously Presented) The method of claim 17, wherein the phosphorylation activity is detected by using, as an indicator, a change in the expression level of a reporter gene that is activated in response to binding of a serine/threonine kinase Pim-1 phosphorylation substrate.
- 50. (Previously Presented) The method of claim 17, wherein the phosphorylation activity is detected using an antibody that recognizes the phosphorylated form of the serine/threonine kinase Pim-1 phosphorylation substrate.
- 51. (Currently Amended) The method of claim 1, 45, or 46, wherein said therapeutic agent for solid tumor eaneer is a therapeutic agent for pancreatic cancer.
- (Currently Amended) The method of claim 10, 47, or 48, wherein said apoptosisinducing agent for solid tumor is an apoptosis-inducing agent for pancreatic cancer.
- 53. (Currently Amended) The method of claim 17, 49, or 50, wherein said anticancer agent potentiator <u>for solid tumor</u> is an anticancer agent potentiator for pancreatic cancer.